

REMARKS

As a preliminary matter, it is noted that claims 4-6 do not appear to be addressed in the outstanding Office Action. However, it is further noted that claims 4-6 were rejected in the Office Action dated September 20, 2004 only under § 112, which rejection was traversed in the amendment filed on December 20, 2004; resulting in a withdrawal of the rejection under § 112 in the outstanding Office Action, leaving no pending rejection against claims 4-6. Accordingly, it is believed that claims 4-6 contain allowable subject matter.

The indication of allowable subject matter in claims 2, 3, 7, 12, 13, 16-18, 20 and 23, as well as the Examiner's detailed and clear Office Action, is acknowledged and appreciated. In view of the following remarks, it is respectfully submitted that all claims are in condition for allowance.

Claims 1, 8, 9, 11, 19, 21, 22, 24 and 25 stand rejected under 35 U.S.C. § 102 as being anticipated by Pardikes '937 ("Pardikes"), and claims 1, 8, 9, 11, 14, 15, 19, 21 and 22 stand rejected under 35 U.S.C. § 102 as being anticipated by Laguana et al. '698 ("Laguana"). Claims 1, 8 and 19 are the sole remaining *rejected* independent claims. These rejections are respectfully traversed for the following reasons.

A. "amount"

The Examiner maintains the pending rejections by asserting that "the term concentration is known as the measurement of 'the amount of a component in a given area or volume.' Applicant's claims do not recite a specific amount . . . The total amount of the individual component may be determined from a concentration measurement." Applicant does not dispute

the aforementioned positions taken by the Examiner. However, it is respectfully submitted that the claims do not need to recite a specific amount to overcome the cited prior art. Each of claims 1, 8 and 19 recites in pertinent part, “*verifying* that a predetermined *amount* of said sample solution is held in said sample cell based on a change over time in an output signal from said photosensor.” Accordingly, the claimed invention requires an affirmative verification step of the “amount” of the solution.

As indicated by the Examiner above, the “concentration” disclosed by the cited prior art means “the amount of a component *in a given area or volume*” (emphasis added). Accordingly, the Examiner is correct in stating that the total amount “of the individual component [in the cited prior art] *may* be determined from a concentration measurement” (emphasis added). However, in order to determine the “amount” with respect to Pardikes and Laguana, one would have to know the “area or volume.” In this regard, the cited prior art is completely silent as to determining the “area or volume,” let alone use that information to verify the “amount.” Accordingly, at best, the cited prior art *could* verify the amount of the sample by using the disclosed concentration, but does not disclose or suggest doing so. Indeed, both Pardikes and Laguana are not concerned with the amount of the sample, but only its concentration. There is no disclosed need or desire to verify the amount of the sample in Pardikes and Laguana.

On the other hand, the claims require verifying that a predetermined amount of the sample solution is held. Even assuming *arguendo* the cited prior art has the ability to carry out the claimed invention, the cited prior art does not expressly nor inherently disclose or suggest doing so as required under the strict requirements of 35 U.S.C. § 102 that each and every limitation be disclosed or suggested by the prior art. In fact, even under 35 U.S.C. § 103, merely because the cited prior art allegedly “can” perform the claimed step does not render doing so obvious. The Examiner is directed to MPEP § 2143.03 under the subsection entitled “Fact that

References Can Be Combined or Modified is Not Sufficient to Establish *Prima Facie* Obviousness", which sets forth the applicable standard:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (*In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990)).

In the instant case, even assuming *arguendo* that Pardikes and Laguana can be modified to perform the verifying step, it is submitted that the "mere fact that [Pardikes and Laguana] can be modified ... does not render the resultant modification obvious" because nowhere does the *prior art* "suggest the desirability of the modification." Indeed, as indicated above, both Pardikes and Laguana have no disclosed need or desire for verifying the amount of the sample solution.

B. "based on a change over time"

With respect to the cited prior art, the Examiner alleges that "[i]n order to maintain a level of concentration it is inherent that measurements are taken periodically during that time of operation to ensure that the concentration may be adjusted accordingly." Even assuming *arguendo* that this allegation is correct, it is not relevant to the claimed invention. Simply because periodic measurements are taken does not necessitate that the amount of the sample is verified *based on the change over time* of those measurements. As described on pages 17-19 of Applicants' specification corresponding to Figure 2 of Applicants' drawings, exemplary processes of the present invention use the change over time of the output signal (i.e., $dS(t)/dt$) as a *basis for verifying the amount* of sample, so that the rate of change in the output signal is a variable in the verifying step. Turning to the cited prior art, even assuming *arguendo* that a plurality of output signals are read periodically, the cited prior art does not disclose or suggest using the rate of change of those output signals as a basis for verifying the amount of sample.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by

probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art device, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that neither Pardikes nor Laguana anticipate claims 1, 8 and 19, nor any claim dependent thereon.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claims 1, 8 and 19 are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejections under 35 U.S.C. § 102 be withdrawn.

CONCLUSION

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

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including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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